

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS
OF THE STATE OF NEVADA HERETOFORE APPROPRIATED**

THIS SPACE FOR OFFICE USE ONLY	
Date of filing in State Engineer's Office	FEB 20 2015
Returned to applicant for correction	
Corrected application filed	Map filed FEB 20 2015

The applicant City of West Wendover, Nevada; City of Wendover, Utah
P.O. Box 2825 of West Wendover
Street Address or PO Box City or Town
Nevada 89883 hereby make(s) application for permission to change the
State and ZIP Code

☒ Point of diversion
 ☐ Place of use
 ☐ Manner of use
 ☐ of a portion
 of water heretofore appropriated under (Identify existing rights by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.)
Permit 49423

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1. The source of water is Underground
Name of stream, lake, underground, spring or other sources.
2. The amount of water to be changed 2.0 second-feet
Second feet, acre-feet. One second foot equals 448.83 gallons per minute.
3. The water to be used for Municipal
Irrigation, power, mining, commercial, etc. If for stock, state number and kind of animals. Must limit to one major use
4. The water heretofore used for Municipal
If for stock, state number and kind of animals.
5. The water is to be diverted at the following point (Describe as being within a 40-acre subdivision of public survey and by course and distance to a found section corner. If on unsurveyed land, it should be stated.)
Peguop Well #1, NW 1/4 NE 1/4 Section 21, T 35 N, R 66 E, MDB&M, at a point from which the Northeast Corner of said Section 21 bears North 71 degrees 26' 44" East 2067 feet.
6. The existing point of diversion is located within (If point of diversion is not changed, do not answer.)
Lot 1 (NE 1/4 NE 1/4) Section 13, T 35 N, R 67 E, MDB&M, at a point from which the NE corner of said Section 13 bears North 55 degrees 6 minutes East, 1334 feet

10-187
 13

7. Proposed place of use (Describe by legal subdivisions. If for irrigation, state number of acres to be irrigated.)

Sections 7, 8, 9, 10, 15, 16, 17, & 18, T33N, R70E, MDB&M and Sections 17, 18, 19, & 20, T1S, R19W, SLB&M

8. Existing place of use (Describe by legal subdivisions. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.)

Sections 7, 8, 9, 10, 15, 16, 17, & 18, T33N, R70E, MDB&M and Sections 17, 18, 19, & 20, T1S, R19W, SLB&M

9. Proposed use will be from January 1 to December 31 of each year.
Month and Day Month and Day

10. Existing use permitted from January 1 to December 31 of each year.
Month and Day Month and Day

11. Description of proposed works. (Under the provision of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) (State manner in which water is to be diverted, i.e., diversion structure, ditches, pipes and flumes or drilled well, pump and motor, etc.)

16-inch diameter cased well drilled and completed to a depth of approximately 500 feet and 14-inch transmission pipeline to supply municipal drinking water.

12. Estimated cost of works \$2.5-million

13. Estimated time required to construct works 2 years

If well completed, describe well.

14. Estimated time required to complete the application of water to beneficial use 10 years

15. Provide a detailed description of the proposed project and its water usage (use attachments if necessary): (Failure to provide a detailed description may cause a delay in processing.)

(see attached Addendum)

16. Miscellaneous remarks:

cmelville@westwendovercity.com

E-mail Address

775-664-3081

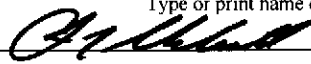
Phone No.

Ext.

APPLICATION MUST BE SIGNED
BY THE APPLICANT OR AGENT

Chris J. Melville

Type or print name clearly



Signature, applicant or agent

City of West Wendover

Company Name

P.O. Box 2825

Street Address or PO Box

West Wendover, NV 89883

City, State, ZIP Code

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ADDENDUM
Application for Permission to Change Point of Diversion under Permit 49423
Basin 10-187 Goshute Valley

The following information is attached to and made a part of an application by the City of West Wendover, Nevada, and the City of Wendover, Utah to change the point of diversion of an existing permit.

The purpose of the application is to change the point of diversion under approved underground Permit 49423 for the cities of West Wendover, Nevada and Wendover, Utah (Cities) to a location on the west side of the Goshute Valley. The Cities have sought to develop underground sources on the west side in the past as evidenced by Application 67991 which was filed in 2001 and denied by the Nevada State Engineer in 2012. In addition, the Cities attempted several times to negotiate with the owners of the Big Spring Ranch to develop sources on the ranch property with no success. Subsequently the Big Spring Ranch property was acquired by Newmont USA Limited (Newmont).

In October 2013 the Cities entered into a surplus water service agreement with Newmont which required Newmont to drill and equip two new municipal wells and construct associated infrastructure to connect the new wells to the Cities transmission pipeline in exchange for Newmont's temporary use of Johnson Spring (Permit 28257, Certificate 12198) during mineral extraction activities near the spring site by Newmont. The application is for the northernmost of the two wells which is identified as Pequop Well #1.

The current populations of West Wendover, Nevada and Wendover, Utah are estimated to be 4,500 and 1,400 respectively. The following future population data is excerpted from the Johnson Spring Transmission System Surplus Water Determination (Aqua, 2013):

West Wendover: According to U.S. Census and city records West Wendover grew by an average of 13% per year between 1992 and 2000 and achieved a population of 4,721. Between 2001 and 2010 the population decreased to 4,410. West Wendover estimates its current population to be 4,500. The population is predicted to grow at the following rates and durations:

TABLE 1 – West Wendover Growth Rate Projection

PERIOD	GROWTH RATE (%)	ENDING POPULATION
2013 through 2030	2.5	6,847
2031 through 2040	2.0	8,347
2041 through 2050	1.5	9,687

Wendover: U.S. Census records show that Wendover grew by an average of 4% per year between 1990 and 2000 and reached a population of 1,537. Between 2000 and 2010 the population decreased to 1,400 and has remained more or less stable. During the high growth period between 1992 and 2000 Wendover grew at approximately one-third of West Wendover's growth rate. For this projection it is assumed that Wendover will grow at one-half of West Wendover's growth rate. Thus, the population is predicted to grow at the following rates and durations:

TABLE 2 – Wendover Growth Rate Projection

PERIOD	GROWTH RATE (%)	ENDING POPULATION
2013 through 2030	1.25	1,729
2031 through 2040	1.0	1,910
2041 through 2050	0.75	2,058

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Over the past twenty years the Cities have completed capital improvements totaling over \$8-million to the water supply and delivery system for Basin 10-187. These improvements, funded primarily through federal and state loan programs and cash reserves, include the completion of two municipal production wells, rehabilitation and reconstruction of Johnson Spring and its pumping facility, rehabilitation of a 1.5 MG culinary water reservoir, interior and exterior coating and floor replacement of a 1.5 MG steel culinary water tank, and the installation of over twenty-four miles of 24-inch and 20-inch transmission pipeline to convey water from Basin 10-187 to the Cities. The Cities regularly prioritize and plan future improvements and maintain rate structures and fund balances sufficient for completion of those improvements.

Future water right and source demands were estimated in the Johnson Spring Transmission System Surplus Water Determination (Aqua, 2013). The source or peak day demands have been calculated based on historical data as required by NAC 445A.66725.1. The results are shown in the table below.

Cities of West Wendover, Nevada and Wendover, Utah Water Right Demand, Source Demand, and Total Demand

Year	West Wendover, Nevada			Wendover, Utah			Total	
	Population	Source Demand (GPM)	Water Right Demand (AF/YR)	Population	Source Demand (GPM)	Water Right Demand (AF/YR)	Source Demand (GPM)	Water Right Demand (AF/YR)
Year 2013	4,500	2,475.00	2,317.50	1,400	428.40	428.40	2,903.40	2,745.90
Year 2030	6,847	3,765.85	3,526.21	1,729	529.07	529.07	4,294.92	4,055.28
Year 2040	8,347	4,590.85	4,298.71	1,910	584.46	584.46	5,175.31	4,883.17
Year 2050	9,687	5,327.85	4,988.81	2,058	629.75	629.75	5,957.60	5,618.56

Currently the Cities divert approximately 2,200 acre-feet/year from Groundwater Basin 10-187 and have an approved duty of 4,335 acre-feet under Permits 29433, 39110, 49060, 49422, 49423, 49595, and 78451. Adding the diversion from Johnson Spring (724 acre-feet/year), a total of 5,059 acre-feet/year can be diverted from Basin 10-187 by the Cities under approved permits and certificates which is sufficient to provide drinking water to the year 2045 (AQUA, 2013). Following is a tabulation of those permits and certificates.

**West Wendover, Nevada and Wendover, Utah
Groundwater Basin 187 Water Rights**

Source	Diversion Type	Status	Permit No.	Certificate No.	Diversion Balance (cfs)	Duty Balance (AFA)
Shafter Well #1	Underground	C	29433	15159	1.47	323.799
Shafter Well #2	Underground	C	39110	15160	0.53	148.535
Shafter Well #3	Underground	C	49060	17190	1.46	733.500
Shafter Well #4	Underground	C	49422	17191	1.25	497.210
Shafter Well #5	Underground	C	49595	17192	1.56	276.740
Shafter Well #6	Underground	A	78451		2.00	1,445.000
Test Well #9	Underground	A	49423		2.00	1,445.000
Total						4,869.784
Allowable Duty Limit (All Underground Permits)						4,335.00
Johnson Spring	Surface	C	28527	12918	1.00	723.954
Duty Balance (All Sources)						5,058.95

A = Approved, C = Certificated

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Once diverted, ground water is conveyed to the Cities via 24-inch and 20-inch transmission pipeline. This pipeline stretches 28 miles from Johnson Spring on the west side of the Goshute Valley to the City of West Wendover. The peak flow capacity of the transmission pipeline is approximately 20 second-feet. Thus, using a peaking factor of 2, approximately 7,000 acre-feet/year can be conveyed in the transmission system and placed to beneficial use. The capacity to transmit the approved diversion of 5059 acre-feet is confirmed.

The importation of water to the Wendover community began with the U.S. military in the 1940s. The development of local drinking water resources is not practicable given the high cost of treating underground water from the Great Salt Lake basin where TDS concentrations are well above 1000 mg/L.

The Cities maintain conservation plans per the requirements of their respective states. All of the wastewater generated in West Wendover, Nevada is reclaimed and used for irrigation at the recreation district's golf course and playing fields. The wastewater facility was recently upgraded to ensure continued reuse of all treated wastewater effluent.

By Order 842, dated April 30, 1984, State Engineer Peter G. Morros designated the northern portion of Basin 10-187 for the preferred uses of Municipal, Quasi-Municipal, and Domestic. The Cities assert that this application to change the point of diversion for an approved permit will not interfere with existing water rights and is consistent with the policies of the Nevada Division of Water Resources for Basin 10-187.

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